| Index of | ••••• |
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|          |       |

| Application No. | Applicant(s)   |
|-----------------|----------------|
| 10/668,881      | GORRELL ET AL. |
| Examiner        | Art Unit       |
| Chris C. Chu    | 2815           |

| √ | Rejected |  |
|---|----------|--|
| = | Allowed  |  |

|   | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| _ | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla        | aim Date |              |                        |   |          |  | Claim Date                                       |                 |  |          |          | Cla   | aim      | Date                   |  |                     |          |          |          |            |          |              |  |                 |           |          |               |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|------------|----------|--------------|------------------------|---|----------|--|--|-----------------|--|----------|----------|-------|----------|------------------------|--|---------------------|----------|----------|----------|------------|----------|--------------|--|-----------------|-----------|----------|---------------|----------|--|--|---|--|--|--|---|--|--|--|--|--------|--------|
|            |          | . 4          |                        |   |          |  |  |                 |  |          |          |       |          |                        |  |                     |          |          |          |            |          |              |  |                 |           |          |               | T-1-1    |  |  | Γ |  |  |  | T |  |  |  |  | $\top$ | $\neg$ |
| <u>_</u> _ | Original | 11/10/04     |                        |   |          |  |  |                 |  |          |          | g     | Original |                        |  |                     |          | <u> </u> | ₫        | Original   |          |              |  |                 |           |          |               |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
| Final      | ij       | 1            |                        |   |          |  |  |                 |  |          |          | Final | īġ       |                        |  |                     |          | <u> </u> | Ē        | ig         | ĺ        | 1            |  |                 |           |          |               |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 0        | -            |                        |   |          |  |  |                 |  |          |          |       | 0        |                        |  |                     |          |          |          | 0          |          |              |  |                 |           |          |               |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 1        | 1            |                        | _ | _        | Т  |  |                 | _  | -        |          |       | 51       |                        | +  |                     |          | Т        |          | 101        | ┰        | 1-           |  |                 |           | $\neg$   | 十             | ᅱ        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 2        | 1            | Н                      |   |          | $\vdash$   | П  |                 | _  | Г        |          |       | 52       | <del></del>            |  |                     |          |          | _        | 102        |          | +            | 1  |                 |           | $\neg$   | 十             | ヿ        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 3        | V            | $\vdash$               |   |          | $\vdash$   |  | Н               |  | t        |          |       | 53       | 111                    |  |                     |          | $\vdash$ | 寸        | 103        | $\top$   | +            | $\vdash$   |                 |           | $\dashv$ | 十             | ᅱ        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 4        | Ť            |                        | _ |          | $\vdash$   |  | Н               | _  | <u> </u> |          |       | 54       | 1-1-1-                 |  |                     |          |          | ┪        | 104        | $\dashv$ | +-           | ┢  | Н               | $\neg$ i  | $\neg$   | _             | ᅥ        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <b></b>    | 5        | 1            |                        |   | _        | <del>                                     </del> |  | H               | -  | 1        | i.       |       | 55       | <del></del>            | · / / · · · /                                    |                     | -4       |          | 一        | 105        |          | +            | $\vdash$   |                 |           |          | -+            | ⊣        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 6        | Ì            | -                      | _ | _        | _  |  |                 | ┢╌   | ╁╴       |          |       | 56       | <del>-       -</del>   | 1 1 1  |                     |          |          | _        | 106        | $\top$   | +            | $\vdash$   |                 |           |          | $\dashv$      | ┪        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 7        | Ì            |                        |   | _        | $\vdash$   | $\vdash$   | $\vdash$        |  | -        |          |       | 57       | <del>-       -</del>   | +  |                     | 70       | ┢        | _        | 107        | _        | 1            | 一  |                 |           |          | 十             | ╗        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 8        | 1            | $\vdash$               | _ | -        | -  | Н  | $\vdash$        |  | $\vdash$ | 1        |       | 58       |                        | <del></del>                                      |                     | -4:      | _        | -        | 108        | -        | +-           | -  |                 |           | -        | _             | ᅥ        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 9        | ┝            |                        |   |          | -  | Н  | H               |  | ┢        |          | -     | 59       | <del>-        </del>   |  |                     | 11.0     | $\vdash$ | ┪        | 109        | $\dashv$ | +            | $\vdash$   |                 |           | $\dashv$ | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 10       | ├─           | $\vdash$               |   | -        | -  |  |                 |  | ├-       |          |       | 60       |                        |  | <u> </u>            | ٦        | -        | ┪        | 110        | +        | +            | $\vdash$   |                 | $\vdash$  | $\dashv$ | 十             | ⊣        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 11       | -            |                        | _ |          | -  |  |                 | ┝  | -        |          |       | 61       | <del>-       -  </del> |  |                     | $\dashv$ | -        | $\dashv$ | 111        | +        | +            | $\vdash$   | -               | $\dashv$  | $\dashv$ | $\dashv$      | ᅱ        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| $\vdash$   | 12       | $\vdash$     | $\vdash \vdash$        |   |          | $\vdash$   | H  | H               | -  | ╁╌       | 3        |       | 62       | <del></del>            | ++-  |                     | -#       |          | -        | 112        | +        | +-           | <del>                                     </del> |                 |           | -        | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
| $\vdash$   | 13       | $\vdash$     | $\vdash \vdash \vdash$ |   | -        |  | $\vdash$   | $\vdash$        | $\vdash$                                     | $\vdash$ |          |       | 63       | <del></del>            | -{   |                     | -        |          | -        | 113        | +        | +            | -  | $\vdash$        | $\vdash$  | -        | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
| $\vdash$   | 14       | $\vdash$     | $\vdash \vdash$        |   | -        | $\vdash$   | H  | $\vdash \vdash$ | ├  | ╁        |          |       | 64       | <del>- - - -</del>     | <del>                                     </del> | <del></del>         |          | _        | -        | 114        |          | +            | -  | $\vdash \vdash$ |           | -        | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 15       |              |                        | _ | _        |  | -  | -               | -  | ₩        |          |       | 65       |                        | 1  |                     |          |          | $\dashv$ | 115        | -        |              | ┢  |                 |           |          | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 16       | $\vdash$     |                        | _ | Ь—       | ╁  | <del>                                     </del> | ┝╾┤             | <del> </del>                                 | ├        |          |       | 66       |                        | + + +  | ++                  |          | <u> </u> | $\dashv$ | 116        | +        | +            | $\vdash$   | $\vdash$        | $\vdash$  | $\dashv$ | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
| $\vdash$   | 17       | $\vdash$     | $\vdash \vdash$        |   |          | ├-   | -  | ┝━┤             | <del> </del>                                 | ┢        |          |       | 67       |                        | +-+-   |                     | -#       | _        | $\dashv$ | 117        | +        | +            | $\vdash$   | $\vdash$        | $\vdash$  | $\dashv$ | +             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            |          | ├            | $\vdash$               | _ |          | -  | $\vdash$   | Н               | ⊢  | ┢        |          |       | 68       | $\rightarrow$          | <del>  -   -  </del>                             |                     | -#:      |          |          | 118        |          | +-           | -  | Н               |           | $\dashv$ | -             | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 18<br>19 | _            | $\vdash$               |   | _        | -  | -  |                 | ⊢  | ├        |          |       | 69       | -+                     | + + -  |                     | -400     |          |          | 119        |          | +-           | -  |                 |           | $\dashv$ | $\dashv$      | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            |          | ⊢            | $\square$              |   |          | <u> </u>   | -  | $\vdash \vdash$ | -  | -        |          |       | 70       |                        | +  |                     | -        | <u> </u> |          | 120        |          |              | <u> </u>   |                 |           | -        | $\dashv$      | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
| -          | 20       | -            | $\vdash$               | _ |          | -  | $\vdash$   |                 | _  | ├        |          |       | 71       |                        |  |                     | -        | <u> </u> | $\dashv$ |            |          | +            | ₩  | Н               | -         | $\dashv$ | +             | 4        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 21       | -            | $\vdash$               |   |          | -  |  | Н               | H  | ┝        |          |       |          |                        |  | <del></del>         | -        | ⊢        |          | 121<br>122 |          | +            | ┾  |                 |           |          | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 22       | -            | $\vdash\vdash$         |   |          | ┝  |  | Н               | -  | $\vdash$ |          |       | 72       | <del></del>            |  | <del></del>         | -        | $\vdash$ |          | 123        | -        | -            | ļ  | _               |           |          | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 23       | _            | $\vdash$               |   |          |  |  | H               | <u> </u>                                     | ├-       |          |       | 73       | -+                     | +  | -                   |          | H        | $\dashv$ |            | _        | +            | -  | Н               |           | -        | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <u> </u>   | 24       |              |                        |   |          | _  |  | H               | <u> </u>                                     | ⊢        |          |       | 74       | $\rightarrow$          | +  | -                   | -        | <u> </u> | $\dashv$ | 124        | $\dashv$ | +            | -  | $\vdash$        |           | _        | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 25       | _            | $\vdash$               | _ |          | <u> </u>   |  |                 |  | ┡        |          |       | 75       | $\rightarrow$          | +  | -                   | 4        | <u> </u> | $\dashv$ | 125        | _        | +-           | <u> </u>   | Ш               |           | _        | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 26       | ⊢            | Н                      |   |          | <u> </u>   | _  | -               |  | ⊢        |          |       | 76       |                        | +  | -                   | -4       | L        | -        | 126        |          | 1            | _  | Н               |           | _        | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 27       |              | $\vdash$               |   |          | <u> </u>   |  | $\vdash$        | -  | ┡        |          |       | 77       | -                      | +  | ++                  | -        | ⊢        | -        | 127        | _        | +-           | -  | Н               |           | _        | $\dashv$      | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 28       | <u> </u>     | $\square$              |   |          | -  |  | $\sqcup$        | <u> </u>                                     | ├-       |          |       | 78       |                        |  |                     | _        | <u> </u> | -        | 128        | -        | +            | <b>!</b>   | Н               |           |          | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
| ļ          | 29       | _            | Ш                      |   |          |  | <u></u>  | $\vdash$        |  | <b>├</b> |          |       | 79       |                        | +  |                     | -        | ╙        | _        | 129        | $\perp$  | +            | -  |                 |           |          | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 30       | <u> </u>     |                        |   |          | <u> </u>   |  |                 | <u> </u>                                     | <u> </u> |          |       | 80       | -++                    | $\bot$   | -                   | 4        | <u> </u> |          | 130        |          | -1           | <u> </u>   | <u> </u>        |           | _        | _             |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <b>└</b>   | 31       | _            | $\square$              | _ |          | -  | Щ  | $\vdash$        | <u> </u>                                     | ⊢        |          |       | 81       |                        | +  | $\dashv$            | 44       | $\vdash$ | _        | 131        | $\perp$  | 1            | ₩  | Ш               | $\square$ | $\vdash$ | $\dashv$      | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <u> </u>   | 32       | _            | $\square$              |   |          | <b> </b> -                                       | <b> </b>   |                 | <u> </u>                                     | ├-       |          |       | 82       | +++                    | +  | $\dashv$            | 44       | $\vdash$ | _        | 132        | $\perp$  | -            | <u> </u>   | L               |           |          | $\dashv$      | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <b>└</b>   | 33       | <u> </u>     | Ш                      |   | L        | <u> </u>   | <b>.</b>   | $\vdash$        | <u> </u>                                     | ₩        |          |       | 83       | +++                    | +  | $\dashv$            | 44       | <u> </u> | _        | 133        | $\perp$  | ـ            | -  | Щ               |           |          | $\dashv$      | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <u></u>    | 34       | <b>—</b>     | $\sqcup$               |   | L_       |  | -  | $\square$       | <u> </u>                                     |          |          |       | 84       | -                      | 4-4-1  |                     | -        | <u> </u> | _        | 134        |          | <del></del>  | ₩  | Щ               | $\square$ |          | $\dashv$      | 4        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <u></u>    | 35       | <del> </del> | -                      |   |          | L-   |  | $\sqcup$        | <u> </u>                                     | <u> </u> |          |       | 85       | +++                    | ++-  | $\dashv$            | 47       | <u> </u> | _        | 135        | - -      | 4_           | ├-   | Ш               | -1        | <b></b>  | $\dashv$      | 4        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| ļ          | 36       | <b>—</b>     | $\sqcup$               |   | L        | L.   |  | Ш               | <u> </u>                                     | ┞        | <b> </b> |       | 86       |                        | +  |                     | 4.5      | <u> </u> | _        | 136        | 4        | 4            | ↓_   | Щ               | $\sqcup$  | $\sqcup$ | $\dashv$      | 4        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| L          | 37       | <u> </u>     |                        |   |          | L  |  | -               | <u> </u>                                     | <b> </b> | 2.5      |       | 87       | +++                    | +  | $\dashv \downarrow$ | 1:       |          |          | 137        | _        | +-           | ــــ   | Ш               | Щ         |          | _             | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 38       | <u> </u>     |                        |   | ļ        | <u> </u>   | ļ  | $\sqcup$        |  | <u> </u> |          |       | 88       | +++                    | +  | $\dashv$            | 4        | <u>_</u> | _        | 138        |          | 4_           | <u> </u>   | Щ               |           |          | $\dashv$      |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <u></u>    | 39       | L            | Ш                      |   | <u> </u> | L-   |  | $\sqcup$        | ldash  | <u> </u> |          |       | 89       |                        | 4-4-1  |                     | 45       | $\vdash$ |          | 139        |          | $\bot$       | ↓_   | Щ               |           | $\sqcup$ | $\dashv$      | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 40       | <u> </u>     | $\sqcup$               |   |          | <u> </u>   | L_   | $\sqcup$        | <u> </u>                                     | <u> </u> | 14       |       | 90       |                        | +  |                     | 45.      | $\vdash$ | _        | 140        |          | $\bot$       | ــــ   | Щ               | Ш         |          | $\dashv$      | $\dashv$ |  |  |   |  |  |  |   |  |  |  |  |        |        |
| <u></u>    | 41       |              | $\sqcup$               |   | <u> </u> | L  | L.   | Ш               | <u> </u>                                     | <u> </u> |          |       | 91       |                        | $\bot$ $\bot$                                    | $\bot\bot$          |          | $\vdash$ |          | 141        | _        | $\perp$      | $\perp$  | Ш               | Ш         | Ш        | $\dashv$      | _        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 42       | L.           | Ш                      |   |          |  | $oxed{oxed}$                                     | Ш               | $ldsymbol{ldsymbol{ldsymbol{ldsymbol{eta}}}$ |          |          |       | 92       | $\bot$                 | 4-4-1  |                     | _        | <u></u>  |          | 142        | _        | 4_           | L_   | Ш               |           |          | _             | Ц        |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 43       | L_           | $\sqcup$               |   | _        | $oxed{igspace}$                                  | Щ  | Ш               | <u> </u>                                     |          |          |       | 93       | $\bot$                 | $\bot$   | $\bot\bot$          |          | <u>L</u> |          | 143        | _        | $\bot$       | $\perp$  | Ш               | Ш         | Щ        | ightharpoonup | Ц        |  |  |   |  |  |  |   |  |  |  |  |        |        |
| L          | 44       |              | L                      |   |          | L  |  |                 | _  | <u> </u> |          |       | 94       |                        | $\bot$   |                     |          | <u>_</u> |          | 144        | _        |              |  |                 |           |          | _             |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
| L_         | 45       | _            | $oxed{oxed}$           |   | L        |  |  | $\Box$          | L  |          |          |       | 95       |                        |  |                     |          | L        | _]       | 145        |          |              | L  |                 |           |          |               | _]       |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 46       |              | I                      |   | L        | L  |  |                 |  | $\Box$   | li.      |       | 96       |                        |  |                     |          |          |          | 146        |          |              | L  |                 |           |          | $\Box$        |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 47       |              |                        |   |          |  |  |                 | Ĺ  | 匚        |          |       | 97       |                        |  |                     |          | Ĺ        |          | 147        |          | L            |  |                 |           |          | $\Box$        |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 48       |              |                        |   |          |  |  |                 |  |          |          |       | 98       |                        |  |                     |          |          |          | 148        |          | $oxed{oxed}$ |  |                 |           |          |               |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 49       |              |                        |   |          |  |  |                 |  |          |          |       | 99       |                        |  |                     |          |          |          | 149        |          | Ι            |  |                 |           |          |               |          |  |  |   |  |  |  |   |  |  |  |  |        |        |
|            | 50       |              |                        |   |          |  |  |                 |  |          |          |       | 100      |                        |  |                     |          | Γ        |          | 150        |          | $I^{T}$      |  |                 |           |          | T             | ٦        |  |  |   |  |  |  |   |  |  |  |  |        |        |